

# CALIFORNIA SCHOOLS

JUNE, 1960



MRS. TALCOTT BATES  
Member, California State  
Board of Education

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*Superintendent of Public Instruction*

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## MRS. TALCOTT BATES, MEMBER CALIFORNIA STATE BOARD OF EDUCATION

Mrs. Talcott Bates was appointed a member of the California State Board of Education in January, 1960, by Governor Edmund G. Brown.

Mrs. Bates was born in New York where she attended the Chapin School and Barnard College. In addition to having completed her bachelor's degree at Barnard, Mrs. Bates has done graduate work at Columbia University, at the University of Zurich, and at Washington University in St. Louis, Missouri, where she received her master's degree. After working as a statistician in radio research and on staff assignment at Barnard College, she taught elementary school and high school classes in North Carolina for two years.

In 1951, four years after Mrs. Bates and her family had moved to California, she was elected to membership on the governing boards of the Monterey City Elementary and Monterey Union High School districts; and she was chairman four of the six years that she served on these boards. Active in civic as well as educational affairs, she has also contributed her services to the Monterey County Community Council, the Monterey Peninsula League, and the Monterey County Symphony Association; and is a member of the local boards of the American Association of University Women, and the League of Women Voters.

Mrs. Bates, her husband who is a pediatrician, and their four sons—David, thirteen, Seth, eleven, Tony, nine, and Chip, seven—live in Carmel.

## THE CHANGING FACE OF EDUCATION<sup>1</sup>

ROY E. SIMPSON, *Superintendent of Public Instruction*

We have recently come through a period of unusually rigorous criticism of the public schools. I am not going to discuss whether the basis for such criticism was valid or fair. My personal conviction is that it was not. But some relevant, trenchant questions were asked about public education, questions that we ourselves had been debating for a long time.

During the months that followed the first wave of criticism, there were swift accomplishments in public education. I would like to cite some of the achievements of the past year or so.

More than 80 elementary schools are teaching foreign language courses this year, whereas last year less than 12 had such courses. In the high schools, only about a dozen last year were using the direct approach to foreign language instruction, whereas this year, with federal matching funds to help buy electronic equipment, nearly 150 are using this method. Two years ago, only two high schools had classes in Russian; today, 20 high schools, several with second year classes, offer Russian language courses.

Federal funds have also helped to increase the equipment and books for courses in science. In addition, professional studies to update science course content are moving ahead by leaps and bounds.

The same is true in mathematics. Here California stole a march on the rest of the nation to expedite long overdue reforms.

A five-year project on the social studies has just been completed which calls for major refinements in this complex of vital subjects, and for an integrated program from the first grade through junior college. It has been proposed that the social studies include provision for one year being devoted to the study of conflicting forces in the world: Asia, Africa, and the U.S.S.R.

Reforms in the teacher credential system are in process. The California State Board of Education has approved reducing the number of credentials from 40 to five. The proposed requirement of academic subject matter preparation for all new teachers is of vital importance.

These are all improvements to which we can point with pride. They show that we have moved swiftly to initiate reforms as they are needed. They stand as our record of accomplishment.

In cities and towns where schools have felt these changes, press and public opinion have been in full support. More than that, attitudes which were critical of the public schools have been moderated.

<sup>1</sup> From an address delivered to the California Elementary School Administrators Association at a conference of elementary school principals and superintendents of elementary school districts, Sacramento, California, April 10, 1960.

However, we have just begun to meet the challenge, so brilliantly highlighted by Sputnik, that emanates from the new age into which we are being rushed by the scientific revolution and from world competition incited by conflicts between the ideals of democracy and communism.

The immediate post-Sputnik clamor has died down. For most Americans, their lives today are no different than they were the day before Sputnik was launched. Their jobs and daily routines are largely unaltered.

We in public education may continue our lives much as we have in the past, but our jobs have changed and will never again be as they were. Our jobs are now primarily concerned with the preparation of students to live, work, play, and serve in the space age opened by Sputnik. This preparation must of necessity be quite different than was required for our lives.

Sputniks are not the only precursors of how different life will be in the future. A report just issued by Labor Secretary James Mitchell gives dramatic evidence of that life in more personal dimensions.<sup>2</sup> It notes a trend that was pointed out by our own enrollment statistics long ago. There will be 50 per cent more people in America's work force in the 1960's than in the 1950's, and the composition of that work force is going to change radically. During the 1950's, the United States became the first nation in history with a manual labor force outnumbered by nonmanual workers. During the 1960's, the ranks of the nation's white collar workers will grow faster than ever before. It is here that the lives of our students will be affected.

In the next decade, professional and technical workers will increase 40 per cent. At the same time, skilled labor will gain only 23 per cent. Managers, clerks, and sales people will increase 23 per cent while farm workers will decrease 17 per cent. Mushrooming research and technological developments will account for much of the change. Growing governmental, industrial, and business organizations, and demands for more personal services, spurred by technical advances, will hasten the trend.

In all of this growth, the gross national product—our annual expenditure for goods and services—will increase 50 per cent. While the standard of living rises, the demand for unskilled labor will remain unchanged.

Education, more than ever before, will be the key to each person's future. Boys and girls who leave school early will thereby reduce their opportunity for a better life. Personal sagas such as those of the nineteenth century self-educated tycoons are unlikely to be repeated in the decades ahead.

<sup>2</sup> *Manpower: Challenge of the 1960s*. U.S. Department of Labor, James P. Mitchell, Secretary. Washington, D.C.: U.S. Department of Labor, 1960, p. 2.

Secretary Mitchell's report underlines clearly the vital role of education for each young citizen, and for this nation.<sup>3</sup> The responsibility for helping this generation to develop a high degree of competency rests on the public schools. The ability of the United States not merely to survive but to grow stronger depends upon a citizenry that is highly competent. The reforms and improvements I have cited are causing the public schools to extend their capacity for producing competence, but the time available for such action is short, and the time required for the results of such action to be felt is long.

Let me show you what I mean. Let us imagine that the proposed revisions in the credential system would be effective next fall. It would then be five years before the first group of students preparing to be teachers would meet the credential requirements set by the revisions; and many more years before the schools would be fully staffed with teachers who meet these requirements. The full effects of the new credential requirements would not be felt until they are reflected in large part in the work of our scientists, engineers, diplomats, businessmen, and other potential leaders. It is apparent that today's reforms in education will take a long time to become fully effective.

The *Stanford Research Institute Journal*, in a recent survey in depth of our competition with the Communists, termed this problem "the inertia of long lead-times," and noted that: "Educational institutions can be considered the reproductive system of a society. And in this system the gestation period is long—15 to 20 years. The leaders of the 1980s—political, industrial, military and scientific—have all been born and are largely educated already."<sup>4</sup>

Education is only one productive effort by society. In education it takes many years to produce results. In science laboratories results are often produced in a few years. The swiftness of developments in the nuclear and missile fields are but two examples of this fact.

Technological progress can be compared with changes in the speed at which man can travel. Man could travel only as fast as a horse could carry him, 1500 years before the Christian era. When Columbus discovered America 30 centuries later, man's fastest travel speed was still dependent upon the horse. Nearly three centuries after Columbus, "old Dobbin" was still the speediest means of travel for Paul Revere.

On a graph of the speeds at which man has traveled, we would draw a horizontal line from 1500 B.C. to about 1830 when, after centuries of stalemate, the "iron horse" broke the "oat barrier." Man took to the air in 1903, and was flying 42 miles per hour by 1910. Persistent, impatient man had pushed the flying speed up to 470 miles per hour by 1945. Then progress stampeded. In the decade from 1945 to 1955, man

<sup>3</sup> *Ibid.*, pp. 15-17.

<sup>4</sup> William J. Platt, "A Prologue to the Spectrum of Conflict." *Stanford Research Institute Journal*, Vol. 3, Fourth Quarter, 1959. Menlo Park, California: Stanford Research Institute, 1959, pp. 116-17.

accelerated flying speeds from 470 to 1500 miles per hour. The line on our speed graph is horizontal for a period of 30 centuries; curves up gently from 1830 to 1945; then shoots sharply skyward.

The speed of vehicles invented by man has broken the sound barrier, and his ingenuity has accelerated the rate of technological change so that many other barriers have been broken in the fields of missiles, physics, and agriculture.

There is no doubt that technological changes are producing a world revolution. Sputnik and the swarm of space shots which followed it are just one phase of the revolution; Secretary Mitchell's figures on our future labor force indicate another phase of it.

In this revolution, education cannot go undisturbed on its way. Nor can it offer mere refinements of today's programs as answers to the revolution. A speaker before the American Association of School Administrators recently charged that education is doing just that. He called it an "undynamic, unprogressive industry," and charged there has not been a "radical innovation in its technology since invention of the book." Others charge that education has managed to evade the impact of the industrial revolution, and is trying now to ignore the scientific revolution.

These are harsh indictments. In defense of the schools it must be pointed out that the public itself has been slow to accept changes in education. Parents tend to judge schools by what they themselves were taught as students, and will deviate from this only in times of crisis. As a result, we have been afforded the luxury of easy-paced change in the past. We cannot afford that luxury in the months and years ahead. Too much is at stake.

The problem poses the following questions. Who will chart the course of the public schools in the crucial months ahead? Will we in education be able to supply the leadership? Will we be willing to initiate a period of unparalleled change in education? Will we be able to win the public support necessary for it? Can we convince our colleagues in education of the need to act more swiftly than ever before? Let us take a brief look at a few of the changes that are possible.

Many changes are being created by science. It is not surprising that this rush of technological advance is producing many new tools for classroom use. Television is one. Most of us acknowledge its potential. A recent bulletin published by the Department reports a study of this potential in practical terms.<sup>5</sup>

Many California school districts are experimenting with classroom television. Most of you know of this work. Many of you have active roles in it. Despite the bugs which these trial runs have revealed, there can be no doubt that television will have a major role in the educational program offered by the public schools.

<sup>5</sup> William H. Allen. *Television for California Schools: A Report of a Study Made for the California State Department of Education*. Bulletin of the California State Department of Education, Vol. XXIX, No. 4, April, 1960. Sacramento: California State Department of Education, 1960.



Newer and more unusual are the teaching machines. In the past few years they have multiplied amazingly in method and complexity. Increasing numbers are in trial use; many have proved their value in industrial education. There may be something reminiscent of the slot machine and "Big Brother" in these gadgets. One cannot ignore, however, what they portend for the classroom. They will not replace the teacher, but can give him more time for work with individuals.

Are educators going to take the lead in encouraging the use of these machines in school? We know there is considerable resistance to both television and teaching machines within the schools; and for our immediate comfort, there is also some public reticence about their use.

Let me suggest another change—greater use of testing. This would include the uniform comparative tests suggested by James B. Conant, and would provide measurement of the attainment of each student at one or more grade levels. The results of such tests might eventually refute the charge made in the annual education edition of the *Saturday Review*, that "the inability to substantiate recommendations with valid evidence has long been the Achilles' heel of educators in their requests for support." The results would also enable the schools to defend themselves against their critics. How do we in education stand on such testing programs? To date, the record shows us generally opposed to them.

Potential changes in education cause questions to be raised about school leadership. In the context of our worldwide competition with Communism, and in adjusting to the scientific revolution, these questions must be answered with imaginative foresight, vigor, and deliberate speed. If professional education is to maintain its leadership in the public schools, it must formulate answers to such questions. We have the potential within our ranks. We must make the fullest use of it by encouraging original, critical, even revolutionary thinking on meeting the challenges before us. We must open wider the door to new ideas.

I am not suggesting that each classroom become a testing ground for experimentation. I am suggesting that public education should engage in provocative, far-ranging debate on important issues and that such debate should be public and involve the best minds in education—administrators and teachers alike. Programs not merely of reform, but also of invention and innovation must emerge from such debate. These programs must meet the needs being created by sweeping changes made necessary by the scientific revolution now in process and they must be conducive to the continued growth of the strong public support that is given the public schools.

The accomplishments of the past year have helped to reaffirm the leadership of professional education. To preserve and strengthen that leadership we must push beyond reform to innovation to meet the personal and national challenges ahead. The momentum for that push must come from persons such as you, and from conferences such as this.



## EDUCATION LEGISLATION ENACTED AT THE 1960 SESSIONS OF THE LEGISLATURE

WALLACE W. HALL, *Associate Superintendent of Public Instruction; and  
Chief, Division of Public School Administration*

During the month of March, 1960, the Legislature held concurrently two, and for a short period of time three, sessions. First, there was the Regular Budget Session, which adjourned on March 26. There were also two Extraordinary Sessions called by Governor Brown, one to consider the abolition of capital punishment, and which adjourned shortly after the Senate Judiciary Committee failed to recommend the bill introduced; the other, convened on February 29, and adjourned on April 7, considered a number of items which the Governor included in his call for the session. Legislation affecting the schools of California was enacted at both the Regular Budget Session and at the First Extraordinary Session.

### FUNDS FOR THE JOINT INTERIM COMMITTEE ON THE PUBLIC EDUCATION SYSTEM

In the regular Budget Session, the Legislature adopted Assembly Concurrent Resolution 1 (Resolution Chapter 2, Statutes 1960), which augmented the funds of the Joint Interim Committee on the Public Education System by \$50,000. This is the committee under whose direction and auspices the Citizens Advisory Commission to the Joint Interim Committee on the Public Education System has been carrying on its work over the last year and a half. The resolution also called upon the committee to make a final report to the Legislature by January 5, 1961.

### TEXTBOOK FUNDS

The Budget Act of 1960 (Assembly Bill 1, Chapter 11, Statutes 1960), introduced by Assemblyman Jesse M. Unruh, also contained language which affected the purchase of textbooks for distribution to the public elementary schools in the state. Pursuant to its constitutional mandate, the State Board of Education at its meeting in Long Beach on March 10, 1960, had adopted new reading textbooks to be used in California public schools beginning September, 1961. This adoption involved the purchase of completed textbooks in basic reading for grades one through six, from two companies (Allyn and Bacon, Inc., and Ginn and Company), whose bids were only for completed books. The supplementary readers adopted included books (published by Ginn and

Company, and by the American Book Company), which were also bid only on a completed book basis.

Unsuccessful attempts were made at the Budget Session to augment Item 361 of the Budget covering the appropriation for the printing and distribution of free textbooks. In addition, the Free Conference Committee, appointed for the purpose of reconciling the differences between the Senate and the Assembly versions of the Budget, recommended that the following language be written into the Budget Act concerning the expenditures of the funds contained in Item 361:

... provided that none of this appropriation shall be available to finance contracts in respect to the new textbook adoptions set forth on page 956 of the Governor's Budget for the 1960-61 fiscal year in which the unit price for any textbook or the total price for any series of textbooks submitted on a finished book basis exceeds by more than 10 per cent, respectively, the average of the three highest unit prices for a competitive textbook or the average of the three highest total prices for a competitive series of textbooks submitted on the basis of leasing plates to the State. . . .

An interpretation of the meaning of this language was found in the following Conference Committee statement concerning the textbook item which appeared in the *Senate Daily Journal* for March 26, 1960, page 357:

Your Committee on Conference has recommended the inclusion in Item 361 of restrictive language designed to insure that textbooks purchased by the State shall be available at reasonable and competitive prices. It is not intended to interfere with the State Board of Education's discretion to adopt and select books.

The language contained in Item 361 will permit the State Board to contract for the purchase of finished textbooks or the printing and binding of books using leased plates so long as the contract price for finished textbooks does not exceed by more than 10 per cent the cost of the highest price competitive textbooks submitted on the basis of leasing plates to the State.

Subsequent to the passage of the Budget Act, the State Board of Education has given serious consideration to the effect of this limitation upon the acquisition of the books adopted by the Board at its March 10 meeting. In the meantime, the affected companies have made modified proposals to the State Board of Education for its consideration whereby the Board may secure the completed textbooks at a price within the ceiling placed by the Legislature. Discussions are continuing between the Board and the affected companies to work out further details, so that the adopted textbooks can be acquired for distribution to the public elementary schools of California.<sup>1</sup> Such contracts as are ultimately signed by the State Board of Education and all publishers providing texts to the State of California, either on a leased plate or completed book basis, must be approved by the Department of Finance pursuant to Government Code Section 13370.

<sup>1</sup> The State Board of Education on May 13, 1960, reaffirmed its previous adoption of the reading textbooks made at its March 10 meeting. It also authorized the execution of contracts between the State Board of Education and the publishers of the completed books, Allyn and Bacon, Inc., American Book Company, and Ginn and Company, respectively. The prices mutually agreed upon were below the legislative ceiling contained in Item 361 of the 1960 Budget Act.

### MASTER PLAN FOR HIGHER EDUCATION

Highlighting the actions of the First Extraordinary Session, affecting education, was the passage of the legislative proposal implementing the recommendations of the Master Plan for Higher Education in California. This plan was the result of several months of joint study by the State Board of Education and the Board of Regents of the University of California covering the needs of higher education until 1975, pursuant to Assembly Concurrent Resolution 88 (Resolution Chapter 200, Statutes 1959), which had been adopted by the 1959 Regular Session of the Legislature. Although originally introduced to the Legislature in the form of two proposed Constitutional Amendments (Senate Constitutional Amendment 1, by Senator Donald L. Grunsky, and Assembly Constitutional Amendment 1, by the late Assemblywoman Dorothy M. Donahoe), the plan finally was embodied in two Senate bills, a Senate Constitutional Amendment, and a Senate Concurrent Resolution.

The principal provisions of the plan were set forth in Senate Bill 33 (Chapter 49, Statutes 1960, First Extraordinary Session), introduced by Senator George Miller, Jr. By amendment of the bill after the untimely death of Assemblywoman Donahoe, it becomes known as the "Donahoe Higher Education Act," thus giving recognition to the great contribution which the Kern County legislatrix made to the study of the needs of higher education in California.

The new plan, which becomes effective for all purposes on July 1, 1961, defines the California system of public higher education as consisting of: (1) all public junior colleges; (2) all state colleges; and (3) the several branches of the University of California.

*Junior Colleges.* The public junior colleges shall continue to be a part of the public school system in the state, and shall also become a part of the newly created system of higher education. The State Board of Education shall continue to prescribe the minimum standards for the formation and operation of public junior colleges and shall exercise general supervision over them. Instruction offered by the junior colleges shall not extend beyond the fourteenth grade level, and shall include programs in one or more of the following categories: (1) standard collegiate courses for transfers to higher institutions; (2) vocational and technical courses leading to employment; and (3) general liberal arts courses. Studies in each of these fields may lead to the associate in arts or associate in science degree.

*State Colleges.* The State College System is to be administered by a board created by the Act and designated as the Trustees of the State College System of California. The board is to be composed of four ex officio members: the Governor, the Lieutenant Governor, the Superintendent of Public Instruction, and a person named by the Trustees

to serve as the chief executive officer of the system; and 16 members appointed by the Governor, except that as of the effective date of the law (July 7, 1960), the present members of the State Board of Education shall serve *ex officio* among the first appointed Trustees.

The terms of the appointed members shall be for four years, except that beginning March 1, 1961, the terms of the appointed members shall be for eight years, assuming that Senate Constitutional Amendment 1 (Resolution Chapter 19, Statutes 1960, First Extraordinary Session), which authorizes the appointment of the members of the State Board of Education to an eight-year term, is ratified by the people at the November, 1960 General Election. It is further provided that if the Trustees and if the Regents of the University of California consent, the chief executive officer of the State College System shall sit with the Regents of the University of California in an advisory capacity, and likewise the President of the University of California shall sit with the Trustees in a similar capacity.

The Trustees of the State College System are to succeed as of July 1, 1961, to all powers, duties, and functions, with respect to the management, administration, and control of the state colleges heretofore vested in the State Board of Education or the Director of Education. Furthermore, they "shall have full power and responsibility in the construction and development of any state college campus, and any buildings or other facilities or improvements connected with the State College System." This will allow the Trustees to secure directly from private architects the architectural services now being performed by the State Division of Architecture.

The state colleges are charged, as their primary function, with instruction in the liberal arts and sciences and in professions in allied fields which require more than two years of education, together with teacher education both undergraduate and graduate through the masters degree. Under certain conditions the doctoral degree may be awarded jointly with the University of California. Furthermore, faculty research is authorized, provided it is consistent with the primary function of the state colleges.

The new Act also grants to the new 21-member board of Trustees power over the appointment and classification of salaries of academic and administrative personnel in the State College System, but leaves to legislative control the nonacademic employees.

*University of California.* By the terms of the Act, the University of California is defined as the primary, state-supported, academic agency for research. Its authority to provide instruction in the liberal arts and sciences and in the professions, including the teaching profession, is restated. It is also given exclusive jurisdiction over instruction in the profession of law, and over graduate instruction in the professions of

medicine, dentistry, veterinary medicine, and architecture. Furthermore, it is given the sole authority in public education to award the doctoral degree in all fields of learning, except that it may agree with the state colleges to award joint doctoral degrees in selected fields. The University is also to make reasonable provision for use of its library and research facilities by qualified faculty members from other institutions of higher education in the state.

*Co-ordinating Council for Higher Education.* The law further creates a new agency in the form of a 15-member advisory body, the Co-ordinating Council for Higher Education. It is to be composed of three representatives each from the University of California, the State College System, the public junior colleges, the private colleges and universities of the state, and the general public. Those representing the University shall be appointed by the Regents, whereas the State College System is to be represented by its chief executive officer and by two Council members to be appointed by the Trustees. Representation from the junior colleges is to consist of a member of the State Board of Education or its chief executive officer, as the Board may from time to time determine, a member of a public junior college governing board, and a public junior college administrator, the latter two to be appointed by the State Board of Education from respective panels of five names each submitted by their respective state-wide associations. Private college representatives are to be appointed by the Governor after "consultations with an association or associations of such private institutions." The Governor is also to appoint the three members to represent the general public.

The general function assigned to the new Co-ordinating Council for Higher Education is to advise governing boards and appropriate state officials in the review of annual budgets and capital outlay requests of the University and the state colleges. The Council is also charged with the responsibility to develop plans for the orderly growth of higher education and to make recommendations to the governing boards as to the need for and the location of new facilities and programs. The Legislature further declared that it would henceforth be its policy not to authorize or acquire sites for new institutions of public higher education unless such sites were recommended by the Council.

Completing the implementation of the Master Plan were two other legislative measures, Senate Bill 35 (Chapter 67, Statutes 1960, First Extraordinary Session), introduced by Senator Hugo Fisher; and Senate Concurrent Resolution 16 (Resolution Chapter 24, Statutes 1960, First Extraordinary Session), authored by Senator George Miller, Jr. The first of these two proposals authorizes the Trustees of the State College System to accept gifts and donations which will aid in carrying out the primary functions of the state colleges, and furthermore

exempts such gifts and donations from the other legal provisions requiring approval of any other state officer. Such gifts and donations are to be reported, however, to the Co-ordinating Council for Higher Education.

Senate Concurrent Resolution 16 declares it to be the intent of the Legislature "within well defined expenditure limits and purposes, based in turn upon the improved system of budgetary reporting" to give a large degree of flexibility to the Trustees of the State College System in determining the most effective use of the funds available for higher education in the state colleges, and to provide in the Budget bills enacted hereafter the same exemptions from fiscal budgetary controls to the state colleges which are presently granted to the Board of Regents of the University of California. There is provision, however, that items for capital outlay shall continue to be subject to review and approval by the Legislature and by appropriate state fiscal officers.

The Master Plan for Higher Education originally contained certain recommendations which would have resulted in the junior colleges receiving increased state apportionments for current operations, and additional loans and grants for capital facility purposes. The required legislation to carry out these recommendations was not passed, however. The recommendations were sent to interim study in the hope that they would be considered again by the 1961 Regular Session.

House Resolution 22, passed during the closing days of the First Extraordinary Session, called upon the University of California and the state colleges to defer the diversion of any students to the junior colleges, due to higher admission standards, until such time as the Legislature had made available increased state support for the junior colleges.

There were a number of other proposals related to the state colleges which secured legislative sanction as well as approval by the Governor. Briefly, they are as follows:

1. A branch of Los Angeles State College, with its curriculum restricted to upper division education courses leading to an elementary teaching credential, is to be established at San Bernardino (Senate Bill 2, Chapter 63, Statutes 1960, First Extraordinary Session).

2. The state college to be located in the North Bay area is to be known as Sonoma State College (Senate Bill 43, Chapter 66, Statutes 1960, First Extraordinary Session, introduced by Senator Joseph A. Rattigan). At the 1957 Regular Session, the Legislature had authorized and appropriated money for the selection of a site to serve the students in the four North Bay counties. Senator Rattigan's bill followed the selection by the Public Works Board of such a site in the vicinity of Cotati, Sonoma County.

3. The new South Bay (Los Angeles) state college in the general vicinity of the Los Angeles International Airport, as recommended in



the Master Plan Report, was authorized by two measures—Senate Bill 15 (Chapter 65, Statutes 1960, First Extraordinary Session), by Senator Richard Richards; and Assembly Bill 20 by Assemblyman Charles Edward Chapel. Senate Bill 15 was signed, Assembly Bill 20 was vetoed by Governor Brown.

4. Henceforth, by the provisions of Assembly Bill 29 (Chapter 53, Statutes 1960, First Extraordinary Session), authored by the late Assemblywoman Donahoe, tenure in the state colleges will apply only to those who hold teaching positions and not to those holding administrative offices. Holders of such positions may acquire tenure as teachers but not as administrators in the state college in which they are employed. As a further safeguard for those employed in the state colleges, Assembly Bill 38 (Chapter 54, Statutes 1960, First Extraordinary Session), introduced by Assemblyman Richard T. Hanna, allows a college employee to retain his accumulated employee rights (sabbatical, sick leave, tenure, and the like), when he transfers to a newly established state college before or during its first academic year. The same rights of the employee obtain when the program of the new college is limited in its first year to an off-campus educational program rather than a regular state college educational program.

#### STATE SCHOOL BUILDING AID PROGRAM

Continuation of the State School Building Aid program, subject to the approval of the electorate at the June 7, 1960 primary election, was assured by the passage of Senate Constitutional Amendment 2 (Resolution Chapter 34, Statutes 1960, First Extraordinary Session). This was authored by Senator Nelson S. Dilworth, who conceived the State School Building Aid program in 1948, and has authored legislation for several bond issues since that time. If approved by the electorate, \$300,000,000 will be made available to carry out the program for the next two and one-half years.

Consolidation of the bond election with the direct primary election was made possible by the passage of Assembly Bill 62 (Chapter 12, Statutes 1960, First Extraordinary Session), introduced by Assemblyman Carley V. Porter. A second constitutional amendment to be voted on at the June, 1960 primary election, also provided for in Assembly Bill 62, is Assembly Constitutional Amendment 6 (Resolution Chapter 35, Statutes 1960, First Extraordinary Session), introduced by Assemblyman John A. Busterud. The purpose of this constitutional amendment is to provide that the legislative members (two Senators and two Assemblymen), on the State Allocation Board shall be voting members. This is a continuation of the practice which has been followed since the inception of the State School Building Aid program. However, if adopted by the people, the proposed constitutional amendment will obviate the necessity of submitting future State School Building Aid bond issues in the



form of constitutional amendments, each of which heretofore has stipulated that the members of the State Allocation Board shall be voting members.

To reduce the need for priority points for consideration of applications by the State Allocation Board, a bill introduced by Senator John W. Beard (Senate Bill 54, Chapter 73, Statutes 1960, First Extraordinary Session), authorized a transfer of \$20,000,000 from the General Fund to the State School Building Aid Fund to be repaid out of the bond issue provided for in Senate Constitutional Amendment 2. This will provide for additional apportionments from the State School Building Aid Fund of \$8,000,000 in April, 1960, and \$2,000,000 on the fifth day of each month thereafter until October 5, 1960. The effect of this law is to make available \$10,000,000 per month (including a previously authorized monthly allowance of \$8,000,000), for apportionment to local school districts qualifying for State School Building Aid. By the reduction or elimination of priority points through making additional money available, it is also expected that funds will be available for the advance purchase of sites upon which construction is not immediately contemplated. Thus, substantial savings can be effected through the purchase of land before improvements have been made upon it.

Assembly Bill 56 (Chapter 75, Statutes 1960, First Extraordinary Session), introduced by Assemblyman Jerome R. Waldie, provides procedures whereby the balance of monies from the sale of the \$300,000,000 bond issue to be voted upon at the June, 1960 primary election after repaying the \$20,000,000 advanced from the General Fund (by Senator Beard's bill), will be available to the State Allocation Board for apportionments. The rate of apportionment will continue at \$10,000,000 per month unless the Legislature, by a concurrent resolution adopted by both houses after January 1, 1961, provides for its increase to \$12,000,000. The Waldie measure further provides that in any month in which it is necessary that the priority point procedure be utilized by the State Allocation Board, not more than \$400,000 may be apportioned for site purchase, comprehensive master plans, or plans and specifications. In effect, this makes possible the advance purchase of some sites even though priority points for construction projects may have to be instituted by the Board.

A successful attempt was made at the Special Session of the Legislature to iron out some of the difficulties experienced in the administration of the State School Building Aid program in relation to newly organized or reorganized school districts. Senator Dilworth's bill (Senate Bill 50, Chapter 39, Statutes 1960, First Extraordinary Session), which was enacted, provides that where a newly formed district includes a district which had previously voted to accept State School Building Aid, such prior authority shall become the authority of the reorganized district to accept the aid if the boundaries of the new district and the

former district are coterminous. The act further provides that conditional or final apportionments made to a school district which later becomes a part of a newly reorganized district shall remain effective until the newly reorganized district becomes effective for all purposes. Thus, conditional apportionments to a school district are not automatically cut off when that district is included in a new school district certified by voter election. It is believed that this legislation will eliminate voter decisions regarding school district reorganization that are based only on the effect of the reorganization on the school construction program of one of the districts involved.

#### SCHOLARSHIP PROGRAM

Implementing the recommendations of the Master Plan for Higher Education, Assembly Bill 10 (Chapter 74, Statutes 1960, First Extraordinary Session), introduced by the late Assemblywoman Donahoe, increases the number of state college scholarships to be awarded each year to a maximum of 16 for each senatorial and assembly district, and to 3,200 scholarships at large by the 1964-65 fiscal year and thereafter. The present number for the 1959-60 fiscal year is eight for each senatorial and assembly district, and 1,600 at large. The bill also changes each annual scholarship award from \$600 of the amount of tuition and fees, whichever is smaller, to an amount between \$300 and \$900, to be determined by the State Scholarship Commission, depending upon the applicant's financial need, but not in excess of tuition and fees.

A further addition to the scholarship program provided by this bill makes it possible for an individual who is awarded a competitive scholarship and who enrolls in a junior college to elect to have the scholarship held in trust for him for a period not to exceed two years and three months, provided that at the time of making the request to the State Scholarship Commission the student meets all the requirements for the scholarship. This provision will make it possible for any student attending a junior college and living at home to defer the acceptance of the scholarship until such time as he transfers to an upper division institution of higher education.

A second scholarship bill was that of Assemblyman Charles B. Garrigus (Assembly Bill 69, Chapter 76, Statutes 1960, First Extraordinary Session), which revised the provisions for scholarships for higher education in the field of agriculture by providing for 100 new scholarships at large for each of the next four fiscal years, and by prescribing eligibility standards comparable to those prescribed for the state competitive scholarship program. After the fiscal year 1963-64, the state agricultural scholarship program shall consist of 400 annual awards. The amount of each competitive scholarship will be \$600 or an amount equal to the tuition or necessary fees or both for the academic year, whichever is the lesser amount.

## LEGISLATION RELATING TO COUNTY BOARDS OF EDUCATION

At the 1959 Session of the Legislature, Senate Bill 742 (Chapter 1759, Statutes 1959), introduced by Senator George H. Miller, Jr., changed the Education Code, relating to the election of school district governing board members, by providing that they henceforth should be elected for a four-year term in lieu of a three-year term at biennial elections to be held in odd-numbered years on the third Tuesday of April. To meet the need occasioned by not holding any school district elections during the spring of 1960, the law further provided that the members of the school boards whose terms were to expire on June 30, 1960, should continue in office through June 30, 1961.

Inadvertently, no reference was made in this bill to the election of members of the county boards of education which, pursuant to Education Code Section 605, were to be held on the same date as the election of members of governing boards of school districts "provided, such elections are held throughout the county on the same date; otherwise the election shall be consolidated with the direct primary election." An opinion of the Attorney General dated December 8, 1959, indicated, since pursuant to the provisions of Senate Bill 742 no school district elections were to be held in 1960, that the elections for members of the county boards of education in 1960 should be consolidated with the direct primary election to be held in June. This posed many practical and procedural difficulties because the boundary lines of the trustee areas from which members of the respective county boards of education must be elected did not coincide with the general voting precincts which would be used in the June primary election.

To meet this situation, Senator Ronald G. Cameron introduced Senate Bill 24 (Chapter 3, Statutes 1960, First Extraordinary Session). This new law provides for four-year terms of members of the county boards of education in those counties in which the county board elections are required to be held on the same day as school trustee elections, and provides for interim appointments to permit the terms of county board members to expire in years in which biennial school trustee elections are held. This obviates the necessity of holding elections for county board members during 1960, except in those counties where such elections would normally be held in connection with the direct primary. To meet the problem created by the failure of certain county committees on school district organization to fix boundary lines of trustee areas so as to coincide with the general election precinct boundary lines, Senator Donald L. Grunsky introduced Senate Bill 41 (Chapter 28, Statutes 1960, First Extraordinary Session), which authorizes county boards of education, upon the request of the county clerks, to provide by resolution that the members of the county board of education shall be elected by voters from the county at large rather than by voters from the

trustee areas, as is now provided by law. The request from the county clerk to the county board of education cannot be made unless he finds that the county and trustee area precinct lines do not coincide. This bill carries with it a termination date as of September 1, 1960. Both of these were urgency measures and became effective immediately upon signing by the Governor.

#### LEGISLATION AFFECTING JUNIOR COLLEGES

Although legislation to carry out the recommendations of the Master Plan for Higher Education relating to the junior colleges was unsuccessful at this session of the Legislature, three bills affecting junior colleges were enacted into law. Senate Bills 31 and 32 (Chapters 47 and 48, respectively, Statutes 1960, First Extraordinary Session), both introduced by Senator Fred S. Farr, dealt with the crediting of junior college tuition payments and the distribution of junior college assets, respectively. Senate Bill 31 provides that county junior college tuition fund payments otherwise due a district no longer maintaining a junior college because of its inclusion in a new junior college district which is effective on or after July 1, 1961, shall be paid to the new district. Senate Bill 32 provides for the disposition of assets of a high school or unified school district maintaining a junior college, when the district ceases to maintain a junior college by virtue of its inclusion in a new or reorganized junior college district. Under the provisions of this act, any balances remaining in the general fund of the high school or unified district at the end of the last year in which such district maintained a junior college shall be divided between the district and the new junior college district. The amount shall bear the same ratio of the balance that the expenditures from the general fund for junior college purposes bear to the other expenditures of the district during the last year the district operated a junior college. In addition, all amounts in the special reserve fund of the high school or unified district deposited there and specifically earmarked by the governing board to be used for junior college purposes, shall be transferred to the newly formed junior college district. In short, the bill provides that funds raised for junior college purposes shall be expended for junior college purposes. It becomes effective as of July 1, 1961.

A third junior college proposal relates to the means by which a high school district or a unified school district seeking to annex itself to a junior college district may vote to accept its share of the outstanding bonded indebtedness of the junior college district. This measure was introduced by Assemblyman Carl A. Britschgi as Assembly Bill 28 (Chapter 42, Statutes 1960, First Extraordinary Session). It amends the sections of the Education Code, relating to the annexation of a high school district or unified school district to a junior college district, by

providing a procedure for assumption by either the high school district or unified school district of its share of the bonded indebtedness of the junior college district as a condition to the annexation. It provides further for an election on such debt assumption in which a two-thirds vote of the electors is required for approval of the assumption of the bonded indebtedness.

#### MISCELLANEOUS ITEMS

Other educational legislation enacted by the 1960 Special Session follows:

Assembly Concurrent Resolution 4 (Resolution Chapter 14, Statutes 1960, First Extraordinary Session), introduced by Assemblyman Sheridan N. Hegland, allocates \$15,000 for the expenses of the Joint Legislative Committee for the Revision of the Education Code and prescribes that the committee shall "give specific attention to school district organization and reorganization, financing and bonding, the powers and elections of governing boards, standardization of terminology, and simplification of complex provisions." A portion of the appropriation is authorized to be made available to the Bureau of Public Administration of the University of California, pursuant to contract, in the performance of services for the Joint Committee on the Revision of the Education Code.

A special validating act, Assembly Bill 49 (Chapter 34, Statutes 1960, First Extraordinary Session), authored by Assemblyman Lloyd W. Lowrey, validated for assessment or taxation purposes the formation of unified school districts which had completed before February 1, 1960, all acts and proceedings necessary for the formation of such a district if the statement and map or plat were filed with the State Board of Equalization and other requisite state and county agencies prior to April 1, 1960.

By the provisions of Assembly Bill 61 (Chapter 20, Statutes 1960, First Extraordinary Session), introduced by Assemblyman Myron H. Frew, a county superintendent of schools, with the approval of the county board of education, is authorized to acquire by gift only and to maintain real or personal property for outdoor science and conservation education programs. The title to such property is to be held in the office of the county superintendent of schools who, with the approval of the county board of education, is authorized to convey such real property to the United States Government or any of its agencies; to the State of California; to any school district under the county superintendent's jurisdiction; or to any political subdivision of the State in exchange for other real properties on such terms as may be mutually agreed upon.

Assemblyman Don Mulford was the author of Assembly Bill 53 (Chapter 43, Statutes 1960, First Extraordinary Session), which authorized school districts to raise the maximum tax rate for the fiscal years

1960-61 and 1961-62, to finance fire safety alterations. The tax increase is limited to 2 per cent of the appraised replacement costs of each building for which the fire prevention improvements are to be made. The adoption of the tax increase is prohibited until the district has filed with the county superintendent of schools a report by the State Fire Marshal certifying that the improvements are necessary, and a further report by the State Department of Education stating that a proposed district bond issue for capital outlay purposes has twice in the last year received a majority, but not a two-thirds vote, and that the district's finances necessitate the tax. The use of the income from such a tax is restricted to meeting the regulations adopted by the State Fire Marshal pursuant to the Health and Safety Code.

The foregoing account indicates that even though the Legislature was in special session only from February 29 through April 7, a very substantial amount of far-reaching educational legislation was enacted during that brief period of time.



## INTEGRATED DATA PROCESSING STUDY

### A Progress Report of a Title V-A National Defense Education Act Project

ALVIN GROSSMAN, *Consultant, Bureau of Guidance*

One of the major obstacles to progress in guidance programs in California schools has been the excessive paper work required to carry on an effective program. Many times, because the time-consuming preparation of data is not possible, vital information does not reach counselors and teachers in time to be of any help in their attempts to guide students. For years counselors have been seeking a system that could be used to keep current records readily available, help students, and make information available for public consumption while it is news, not history.

Concern with these and other obstacles to the improvement of guidance services has led the Bureau of Guidance of the California State Department of Education to initiate a study of the processing, recording, and utilization of pupil personnel information. The purposes of the study are (1) to secure data on current pupil personnel practices, and determine the feasibility of setting up a state-wide integrated data processing system; (2) to establish a pilot data processing center to test out procedures in an operational setting; and (3) to consider the establishment of a state-wide network of data processing centers. The study is being financed with funds from the National Defense Education Act of 1958.

To carry out this program, Superintendent of Public Instruction Roy E. Simpson appointed the following persons members of the State Committee on Integrated Data Processing, January 6, 1960: John A. Barr, Professor of Education, San Jose State College; John G. Caffrey, Director of Research, Palo Alto Unified School District; William E. Day, Instructor, Compton College; Merle H. Elliott, Director of Research, Oakland Unified School District; Allen J. Gruman, Co-ordinator of Research, Kern County Joint Union High School and Junior College District; J. Richard Harsh, Assistant Director of Guidance and Research, Office of Los Angeles County Superintendent of Schools; Elmer C. Wagner, Associate Registrar, Stanford University, and Alvin Grossman, Chairman; and Consultant, Bureau of Guidance, California State Department of Education.

In order to have competent technical assistance for the study the Bureau of Guidance entered into a contract for the services of the System Development Corporation, which assigned Ellis Myer and Harry Silberman to work with the committee.



The committee selected the following areas of pupil personnel information for investigation: programming, preregistration, and registration; testing; reporting to parents; attendance accounting; statistical reports; and cumulative records.

The major problem is to find a method of communicating and utilizing pupil personnel information that will improve high school guidance and counseling procedures and provide most of the essential information about a student in comprehensible form.

It is also deemed important to ascertain where, how, and why information is collected, processed, or used in the carrying out of school affairs.

After the committee had devoted time to acquiring a knowledge of modern processing machines it was decided that such machines can contribute much to the effective handling of school system data. A method for collecting information on existing data processing procedures in the schools was developed.

The committee then organized into investigating field teams of a few members each, and conducted data processing surveys in the high schools of 20 school districts. The schools in half of these districts were selected on the basis of their mechanical data processing programs; the other half had had no previous history of using data processing equipment. At this time the field investigations are nearly completed.

The next task of the committee is to analyze the information obtained in the survey. The plans for a pilot data processing center operation will depend on the results of the analysis. Additional progress reports will be forthcoming as the program moves along.

## ENROLLMENTS IN BUSINESS EDUCATION IN FOUR-YEAR HIGH SCHOOLS IN CALIFORNIA

LELAND P. BALDWIN, *Regional Supervisor, Bureau of Business Education*

Analyses of enrollments and enrollment trends in business education subjects are essential to the development of curriculum patterns in the public secondary schools in California. This analysis of enrollments in business subjects has been made to determine the number, per cent, and size of the four-year high schools offering certain business courses and the grade levels at which the courses were generally taught.

Table 1 shows the distribution of the 356 four-year high schools in California in 1956, according to size as determined by enrollments:

TABLE 1  
Distribution of Four-Year California Public High Schools  
According to Total Enrollment

Total enrollment	Number of schools	Total enrollment	Number of schools
Under 100.....	31	600-699.....	16
100-199.....	43	700-799.....	11
200-299.....	45	800-899.....	15
300-399.....	29	900-999.....	11
400-499.....	21	1,000-1,999.....	92
500-599.....	16	2,000 or more.....	26

Table 2 shows the number of schools offering the nine subjects most frequently included in the business education program, the enrollments in these subjects, and the rank order of importance according to the number of schools offering the subjects and according to the enrollments for the subjects. Business English was tenth in the rank order according to the number of schools in which it was included in the business education program, but seventh in the rank order according to enrollments; mathematics was eleventh according to the number of schools, but ninth according to enrollments.

Table 3 shows the enrollment by grade level in each of the subjects most frequently included in business education programs offered by the four-year high schools.

TABLE 2

Number of Schools Offering Selected Business Subjects, Enrollments in the Subjects and the Comparative Rankings of the Subjects According to the Number of Schools and Enrollments

Subject	Number of schools	Rank order	Enrollments	Rank order
Typewriting, first year.....	356	1	55,058	1
Bookkeeping, first year.....	332	2	13,822	4
Typewriting, second year.....	330	3	17,322	3
Shorthand, first year.....	320	4	11,670	5
General business.....	261	5	21,170	2
Shorthand, second year.....	179	6	2,842	11
Clerical office practice.....	144	7	4,123	8
In-school work experience.....	128	8	4,789	6
Bookkeeping, second year.....	109	9	1,544	15

TABLE 3

Enrollments in Each of the Nine Subjects Most Frequently Included in the Business Education Program, According to Grade Level

Subject	Enrollments			
	Grade nine	Grade ten	Grade eleven	Grade twelve
Typing, first year.....	11,056	42,539	1,393	70
Typing, second year.....	---	2,728	13,785	809
Bookkeeping, first year.....	---	3,665	8,395	1,762
Bookkeeping, second year.....	---	5	615	924
Shorthand, first year.....	50	650	9,788	1,168
Shorthand, second year.....	---	10	145	2,687
General business.....	16,609	4,306	184	71
In-school work experience.....	93	490	1,766	2,440
Clerical office practice.....	---	17	1,119	2,987

Table 4 shows the per cent of all schools of each size that offered one of the subjects most frequently included in the business education program. Typewriting, first year, was offered by all the four-year high schools. The other subjects followed in this order: bookkeeping, first year; typewriting, second year; shorthand, first year; general business; shorthand, second year; clerical office practice; in-school work experience; bookkeeping, second year.

**TABLE 4**  
**Per Cent of Schools of Each Size Offering Each of the Nine Business Subjects Most**  
**Frequently Included in the Business Education Program**

Subject	Per cent of schools with enrollments											
	Under 100	100 199	200 299	300 399	400 499	500 599	600 699	700 799	800 899	900 999	1,000 1,999	2,000 or more
Typewriting, first year.....	100	100	100	100	100	100	100	100	100	100	100	100
Typewriting, second year.....	87	93	93	96	100	88	94	100	100	91	95	73
Bookkeeping, first year.....	71	88	93	94	99	88	100	100	100	90	99	100
Bookkeeping, second year.....	6	23	21	7	14	31	20	36	26	18	46	65
Shorthand, first year.....	39	86	88	96	99	88	100	100	80	93	90	100
Shorthand, second year.....	16	46	42	34	38	62	62	63	40	54	67	73
General business.....	51	65	55	65	71	94	63	72	85	80	88	92
Clerical office practice.....	18	30	21	35	33	37	37	72	52	36	56	54
In-school work experience.....	16	30	38	34	33	56	44	45	26	36	42	38

# Departmental Communications

## OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION

ROY E. SIMPSON, *Superintendent*

### APPOINTMENT TO STAFF

CONSTANCE E. LEE was appointed Principal Librarian of Reader Services, Division of Libraries (State Library), on April 19, 1960. Miss Lee has been Reference Librarian since 1955. Prior to her service with the State Library she had served four years in the Library of Congress, the last three as head of the American and British Exchange Section. A native of Berkeley, California, Miss Lee received her bachelor of arts degree from Reed College; and her bachelor of library science and master of arts degree from the University of California, Berkeley.

### DIVISION OF INSTRUCTION

JAY DAVID CONNER, *Chief*

### JOINT COMMITTEE ON INSTRUCTION FORMED

Four major professional organizations in California have recently taken joint action to improve the co-ordination of their educational activities. These organizations, the California Association of School Administrators, California Association of Secondary School Administrators, California Elementary School Administrators Association, and California Junior College Administrators Association, have formed the California Administrators Associations Joint Committee on Instruction. The first action of the new joint committee was to prepare a statement on the need for articulation. The statement follows:

After our experience of getting acquainted and working together, we the members of the California Administrators Associations Joint Committee on Instruction, strongly urge our representative organizations and all personnel on all levels of education in California to take immediate action toward articulation in our instructional program. We are convinced that the need is urgent, and particularly in the areas of foreign language, mathematics, science, and programs for gifted children. Unless we get together soon, our programs are going to continue to conflict at the expense of the child. We are convinced that the various levels can work together on this. We do not wish to imply that nothing is being done in articulation. We just believe that it is too little and too scattered. We urge all to start this now at any level from local district to state-wide organizations. We urge

all not to wait for the other group or level to initiate the program for fear of being accused of dictation. The need is too great. We feel that this has been talked about long enough. The need now is for action. It is later than we think.

## BUREAU OF TEXTBOOKS AND PUBLICATIONS

IVAN R. WATERMAN, *Chief*

### RECENT PUBLICATIONS OF THE STATE DEPARTMENT OF EDUCATION

CARL A. LARSON. *California's Need for Teachers, 1959-1971*. Bulletin of the California State Department of Education, Vol. XXIX, No. 1, January, 1960. Pp. viii + 48.

This bulletin is a report of the eleventh annual study of the supply of and demand for teachers for California public schools. The information that it contains regarding the extent of the need for teachers includes data on the numbers of certificated personnel required to replace those who retire, resign, die, or are teaching with provisional credentials; and on those needed each year to care for increased enrollments. The report on the supply of certificated personnel for the years 1959-1971, includes data on candidates for credentials in California teacher education institutions; teachers prepared outside the state; persons not now teaching who formerly taught or were prepared for teaching; and persons serving on other than regular credentials. Projections in this study show that by 1970, the supply of teachers is expected to exceed the demand by a comfortable margin. Far-reaching changes involved in the newly proposed structure for institutions of higher education in California, and the possible effects of higher certification standards should be taken into consideration in an analysis of this study.

Copies have been distributed to county, city, and district superintendents of schools, principals of elementary and secondary schools, other administrative and supervisory personnel, and to selected organizations interested in teacher recruitment.

*A Manual for the Study of School District Organization by County Committees, Revised, 1960*. Bulletin of the California State Department of Education, Vol. XXIX, No. 2, February, 1960. Pp. vi + 82.

The policies and criteria approved by the State Board of Education for the reorganization of school districts into stronger and more adequate administrative units are set forth in this manual. The manual also suggests procedures that are helpful in preparing reports on reorganization of school districts in areas where a study by the augmented county committee had resulted in a recommendation that the proposal be submitted to the State Board of Education for examination. This revised manual is presented as a body of information and suggestions for the use of county committees on school district organization and includes relevant changes made by the 1959 regular session of the Legislature.

Copies have been distributed to county and city district superintendents of schools. The price is 50 cents a copy, plus sales tax on California orders.

*Mathematics and Industrial Arts Education: Guide for the Improvement of Instruction in Mathematics Courses Relating to Industrial Arts and the Practical Application of Mathematics in Each Area of Industrial Arts in Grades Seven Through Twelve*. Project Conducted Under National Defense Education Act of 1958, Public Law 864 of the 85th Congress. Robert L. Woodward, Project Co-ordinator, Consultant,

Industrial Arts Education, California State Department of Education.  
Sacramento 14: California State Department of Education, 1960.  
Pp. x + 102.

This publication presents the material developed by the Mathematics-Industrial Arts Project Committee at a workshop held during August, 1959, at California State Polytechnic College, and is designed to assist mathematics and industrial arts teachers in the improvement of their instructional programs.

The names of mathematics operations and the topics making use of mathematics are listed alphabetically in a mathematics index. Directions for selected industrial arts activities that make use of mathematics are provided in seven sections. Each section contains activities related to a specific area of industrial arts—auto mechanics, drafting, electronics, graphic arts, handicrafts, metalwork, and woodwork. Selected references appear at the end of each section.

Copies have been distributed to all superintendents of schools and supervisors of industrial arts; to principals of junior high schools, senior high schools, and four-year high schools in quantities sufficient to provide one copy for each industrial arts teacher and approximately one copy for each two teachers of mathematics; and to principals of elementary schools with seventh and eighth grades in Contra Costa, Kern, Monterey, Orange, Tulare, and Los Angeles counties. Copies for other elementary schools with industrial arts programs in grades seven and eight will be furnished upon request from superintendents of schools. The price is \$1.00 per copy plus sales tax on California orders.



# For Your Information

## STATE BOARD OF EDUCATION ACTIONS

The following actions were taken by the State Board of Education at its regular meeting held in Sacramento, April 7 and 8, 1960.

### *Approval of Changes in School District Organization*

In accordance with the provisions of Chapter 9, Division 5 of the Education Code (Section 3151), the Board approved the following proposals regarding changes in school district organization:

*Formation of a junior college district in San Diego County*—A proposal by the San Diego County Committee on School District Organization that an election be held to determine whether the voters in the Sweetwater Union High School District wish to form a junior college district.

*Formation of a junior college district in San Diego County*—A proposal by the San Diego County Committee on School District Organization that an election be held to determine whether the voters in the Grossmont Union High School District wish to form a junior college district.

*Formation of a unified school district in Colusa and Glenn Counties*—A proposal by the Colusa County Committee on School District Organization that an election be held to determine whether the voters in the Princeton Joint Union High School District (comprising the Butte City, Codora, Glenn, and Union elementary school districts in Glenn County, and the Princeton Union Elementary School District and Princeton Joint Union High School District in Colusa County), wish to form a unified school district.

### *Reappointments to Commission on Discrimination in Teacher Employment*

In accordance with Education Code Section 363, the Board approved the reappointments of the following members of the Commission on Discrimination in Teacher Employment, for terms ending June 30, 1964.

George A. Beavers, Jr., Chairman of the Board, Golden State Mutual Life Insurance Co., 1999 West Adams Street, Los Angeles, California

Arthur F. Corey, Executive Secretary, California Teachers Association, 1705 Murchison Drive, Burlingame, California

J. Marc Jantzen, Dean, School of Education, College of the Pacific, Stockton, California

### *Approval of Organization for School District Membership*

In accordance with Education Code Section 1131, the Board approved the following organization for which memberships for schools may be paid from district funds for the school years 1959-60, 1960-61, and 1961-62, subject, however, to the organization notifying the Department of Education immediately whenever there is a change in its constitution,

bylaws, or purposes, and subject further to withdrawal or approval by the State Board of Education at its discretion.

California Small School Districts Association<sup>1</sup>

*President:* Carlyle T. Benson

*Executive Secretary:* Marguerite E. McLean

*Headquarters Address:* 6587 St. Helena Road, Santa Rosa, California

#### **Revocation of Credentials for Public School Service**

The Board revoked the credentials, life diplomas, and other documents for public school service heretofore issued to the following persons, effective on the dates shown:

<i>Name</i>	<i>Date of birth</i>	<i>Revocation effective</i>	<i>By authority of Education Code Section</i>
Barnes, Donald Wayne .....	10-4-25	April 8, 1960	13207
Davis, Charles Hunter .....	10-10-12	March 20, 1960	13205
Doran, Billy Dean .....	5-8-27	March 28, 1960	13205
Holmes, Clifford Verne .....	7-13-19	March 24, 1960	13205
Kaldahl, Charles Lavern .....	5-18-30	March 6, 1960	13205
Mayer, Charles Wilbert .....	7-22-33	March 15, 1960	13205
Torrez, Charles Vincent .....	7-7-32	April 8, 1960	13207
Wayland, Lyle Ellsworth .....	10-29-21	April 8, 1960	13207

#### **SIXTH ANNUAL WORKSHOP FOR TEACHER EDUCATION**

The sixth annual Teacher Education Workshop will be held at San Diego State College, August 14 to 20, 1960. Manfred Schrupp, Dean of Education and Extended Services, San Diego State College, will direct the workshop; and Mrs. Mary Jean Harder, Chairman of Teacher Education, California Congress of Parents and Teachers, Inc., is serving as the Chairman of the Planning Committee for the Workshop.

The major purposes of the workshop are to provide opportunities for educational leaders in California to consider program development in the preparation of teachers for California schools; to provide more extensive consideration of the essential elements of the teacher education curriculum; and to widen the areas of understanding of curricular problems. Basic guidelines for teacher education which were developed in the 1959 workshop held at Dominican College will be applied to problems of preservice teacher preparation in the 1960 workshop.

Sponsors of the workshop are the California Association of School Administrators, California Congress of Parents and Teachers, Inc., California Teachers Association, California State Department of Education, California School Boards Association, and the California Council on Teacher Education.

Interested persons may secure further information regarding the workshop by writing to Manfred Schrupp, Dean of Education and Extended Services, San Diego State College, San Diego.

<sup>1</sup> Approved for membership by county superintendents of schools only because this organization does not accept schools as members.

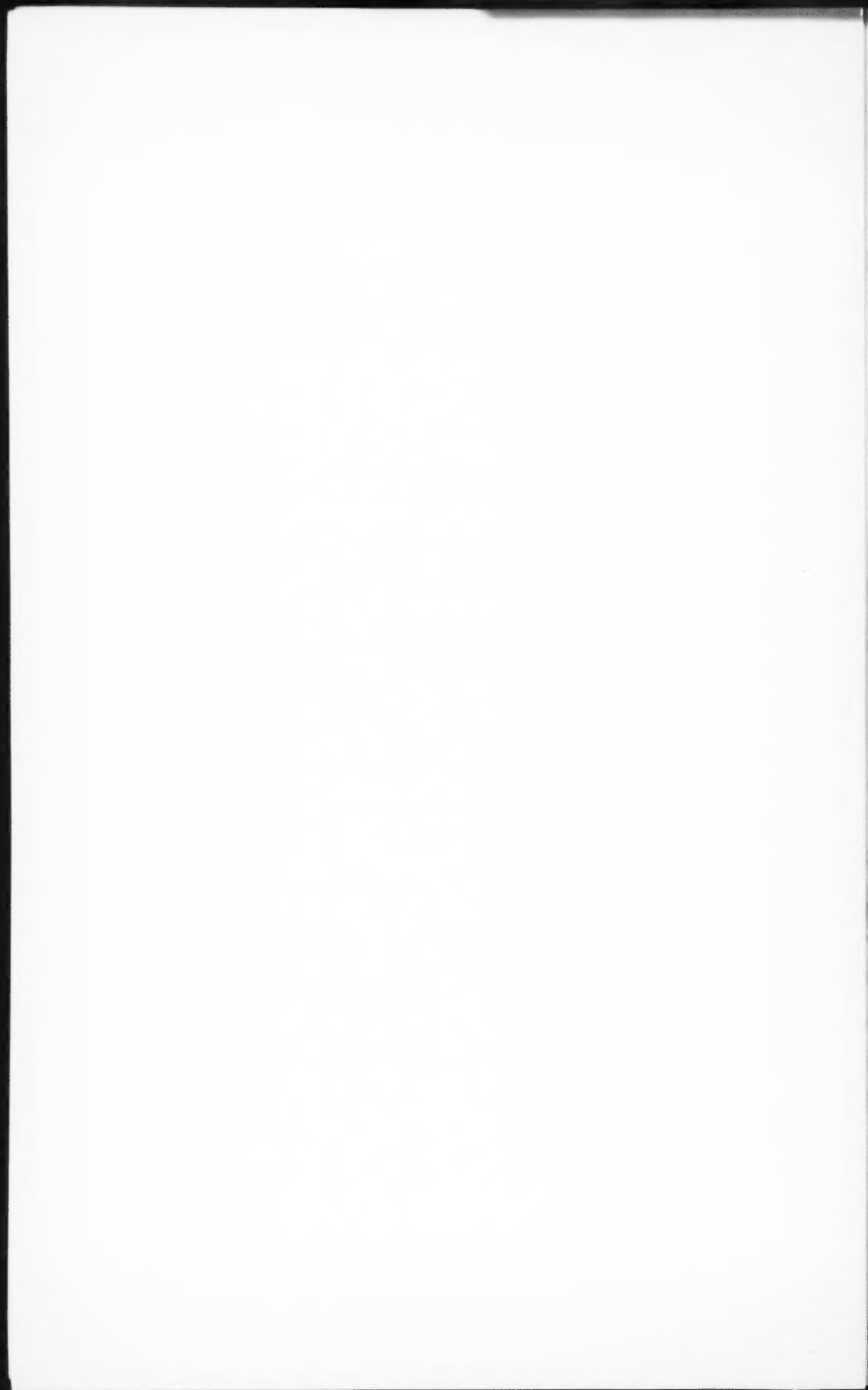
# Professional Literature

## PUBLICATIONS RECEIVED

- BROWN, JAMES W., and OTHERS. *A-V Instruction: Materials and Methods*. New York 18: McGraw-Hill Book Co., Inc., 1959. Pp. 554. \$7.95.
- CARMICHAEL, OLIVER CROMWELL. *Universities, Commonwealth and American: A Comparative Study*. New York 16: Harper & Bros., 1959. Pp. xx + 390. \$6.00.
- CONANT, JAMES B. *The Child, the Parent, and the State*. Cambridge, Mass.: Harvard University Press, 1959. Pp. 212. \$3.50.
- The Educational Program: Adolescence*. Review of Educational Research, Vol. XXX, No. 1, February, 1960. Washington 6, D.C.: American Educational Research Association, 1960. Pp. 1-92. \$2.00.
- The Efficiency of Freedom*. Report of the Committee on Government and Higher Education, MILTON S. EISENHOWER, Chairman. Baltimore 18: Johns Hopkins Press, 1959. Pp. 44. \$1.00.
- GILES, HERMANN HARRY. *The Integrated Classroom*. New York 3: Basic Books, Inc., 1959. Pp. 338. \$5.00.
- GLENNY, LYMAN A. *Autonomy of Public Colleges: The Challenge of Coordination*. New York 18: McGraw-Hill Book Co., Inc., 1959. Pp. 326. \$5.95.
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